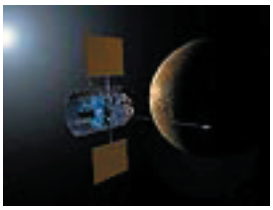
NASA Explorer Schools News
A monthly newsletter from the teachers of tomorrow's explorers

Featured Mission



MESSENGER

Mercury is the closest planet to the sun. It is the densest planet in our solar system. It has been explored less than any of the four inner planets. These are some of the reasons NASA is sending a mission to Mercury. MESSENGER was launched in the summer of 2004. The name stands for **ME**rcury **S**urface, **S**pace **EN**vironment, **GE**ochemistry, and **R**anging. It is NASA's first mission to Mercury in 30 years. It will be the closest look ever at the innermost planet in our solar system. MESSENGER will study Mercury in three flybys. Then it will settle into orbit in 2011. It will send data back to Earth for a year.

MESSENGER will map the surface of Mercury. It will send back data about Mercury's thin atmosphere. It will also send back data on the magnetic fields and chemical make-up. Scientists hope to learn why Mercury is so dense. As it flies by, MESSENGER will observe Earth. Then on its way to Mercury, it will also observe Venus. MESSENGER will be in very high temperatures during the mission. This is because it will be so close to the sun. The surface of Mercury can reach 840 degrees Fahrenheit. The instruments on MESSENGER are very delicate. They are behind an insulated sun shade. They will stay a cool 80 degrees. The instruments will stay behind the shade while they study the planet. The data they gather will tell us more about the formation of the solar system.

Read more about MESSENGER and the planet Mercury at:

http://www.nasa.gov/mission_pages/messenger/main

http://starchild.gsfc.nasa.gov/

NES Spotlight

G.W. Carver Academy
Students: 650
Teaching Faculty: 40

G.W. Carver Academy is in Waco, Texas. In 1956, this was an all African-American high school. It later became a 6th grade center. It changed again. In 1993, it became a magnet middle school. Carver takes part in academic contests with other Texas schools. Carver uses team teaching. This means pairs of teachers work together in a classroom to help their students learn. The school has four new science labs. It has three updated computer labs and a distance learning room. Carver has won the GTE Growth Initiative for Teachers (GIFT) fellow grant award. This award is given for new and creative science and math projects. Carver Academy is really lighting up the future!

NASA Explorers are people like you

Name: Cecilia Aragon
Education: Ph. D. in Computer Science
Job Title: Computer Scientist

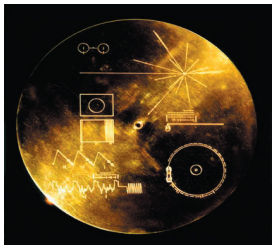
Cecilia works as a computer scientist at NASA's Ames Research Center. She studies ways to improve air travel safety. She is working on how to show wind shear and airflow problems to pilots. She has developed a special cockpit display system. This system warns pilots of disturbances in the air. This system was tested in rough conditions. It reduced problems by over 60%. Cecilia thinks that the coolest part of her job is being able to come up with new ideas. She likes to work on computer systems that could save lives. "Building the next generation of aircraft, spacecraft and controller displays is really exciting!" In her spare time Cecilia is an aerobatic pilot. "I fly air shows and teach pilots how to fly loops, spins and upside down!"

Bytes and Bits

Safety is an important part of every NASA mission. You can learn about the safety training for astronauts here:

http://www1.edspace.nasa.gov/astroschool/survival/

NESN Puzzler



Which President's voice is recorded on the "Golden Record" carried on each of the Voyager spacecraft?

The first ten individual NES students to send the correct answer will win a NASA prize! Send us your name, your teacher's name and your school's name and address. Answer to last month's puzzler: 7.82 kilometers per second (4.86 miles per second).